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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,910	07/31/2001	Keun-Shik Nah	06192.0210.NPUS00	1154

7590

05/05/2004

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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 05/05/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application

09/917,910

Applicant(s)

NAH ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on February 09, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 08, 2004 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Funakoshi, and further in view of Yamamura.

1. Claim 1.

“A real size display system, comprising: a flat panel display unit including a plurality of dots for displaying image information and providing information on a size of the dots; and an image converter that receives first image information, converts the first image information into second image information and outputs the second information to the flat panel display unit, wherein the

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first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Funakoshi in paragraph 0024 discloses that the image information can be repeated and a right gage can be displayed on a real size display by changing into the system of coordinates (x y) of a pixel unit (equivalents to dots ,as applicant ‘s claim language). The step of a display unit including a plurality of dots for displaying image information is obvious because the two references Yamamura and Funakoshi are using a display unit to display a document image or video image, and also it is well known in the art that the display unit including a plurality of dots or pixels. Yamamura in paragraph 0004 discloses that is creating the source of an image for every display size (is equivalent of a display resolution: The number of pixels (in both height and width) making up an image. The more pixels in an image, the higher the resolution, and the higher the resolution of an image, the greater its clarity and definition (and the larger the file size). Resolution can also refer to the output device, such as a computer monitor or printer, used to display the image. Image file resolution is often expressed as a ratio (such as 640x480 pixels), as is monitor resolution; however, resolution is also expressed in terms of dots per inch (dpi). The assumed universal monitor resolution for web users is 72 dpi. Image file resolution and output (print or display) resolution combine to influence the clarity of a digital image when it is viewed) of a graphic display device, the class of source of an image to create increases and it is not realistic. Moreover, if it is expanding or reducing the size of an image, using the same source of an image so that the magnitude of a photographic subject may be kept constant, the need of carrying out delicate size adjustment will arise, taking into consideration the size of the source of an image, and the display size of a graphic display device. In order to carry out this adjustment, the ruler used as criteria etc. is displayed on a graphic display device, and size adjustment will be performed, comparing

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this with actual magnitude. It must carry out, whenever it is necessary to do such an activity for every graphic display device and the sources of an image differ. Therefore the step of image information based on the dot size information received from the display unit is obvious.

Funakoshi in paragraph 0021 teaches in drawing 7, it is expressing that the coordinates of point P are (u, v) as $P(u, v)$. Moreover, in case these coordinates are the system of coordinates (u, v) of the real size unit on a print and display these on CRT, they shall be changed into the system of coordinates (x, y) which make the pixel of CRT a unit automatically. Examiner's note: the image conversion is done from coordinates (u, v) into of coordinates (x, y) . Funakoshi on first page under subject of "solution" teaches a real size display part 33 is shown on a document image shown on a display screen and then changed into optional location. Funakoshi does not explicitly specify a flat panel display, but Funakoshi discloses a CRT display that can have a flat panel display. However, Yamamura teaches in paragraph 0016, a graphic display device 3 can display the source of an image from the picture reproducer 2 amended by the image size compensator 1, and various things, such as what is depended on the Braun tube, and a thing using liquid crystal (equivalent to LCD, that has a flat panel display), can be used for it.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yamamura into Funakoshi in order to enable automatic display of videos at the same size using liquid crystal.

2. Claim 2.

"The real size display system according to claim 1, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data", The steps are obvious, because image information should have

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magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data. Applicant should be more explicit about mentioned information rather than general terms.

3. Claim 3.

“The real size display system according to claim 1, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image information, thereby enabling real size display as desired by a user”, Funakoshi in paragraph 0024 teaches the limitation of claim language. And also Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor.

4. Claim 4.

“The real size display system according to claim 1, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on the dot size information provided from the display unit, and outputs the second image information to the flat panel display unit”, Applicant should be more explicit about R component, G component, and B component, because it is well known to a person skilled in the art that the opacity is the amount of light passes thru an object pixel. And the brightness/intensity/luminance is defined as quantity of light. The light is combination of R component, G component, and B component.

5. Claim 5.

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“A real size display system, comprising: a photographing unit for photographing an image of a subject, and outputting first image information that includes measurement information of the subject; a flat panel display unit including a plurality of dots for displaying image information and providing information on a size of the dots; and an image converter that receives first image information, converts the first image information into second image information and outputs the second information to the flat panel display unit, wherein the first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. The step of the first image information includes measurement information is obvious because the first image can be provided by picture device or camera. This device can estimate the distance of an object. And also the step of converting first image information into second image information is obvious because by converting first image information (an image from camera or etc.), creating second image information (the actual size of an object). And also see rejection of claim 1.

6. Claim 6.

“The real size display system according to claim 5, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data”, see rejection of claim 2.

7. Claim 7.

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“The real size display system according to claim 5, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image information, thereby enabling real size display as desired by the user”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. See rejection of claim 3.

8. Claim 8.

“The real size display system according to claim 5, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on the dot size information provided from the display unit, and outputs the second image information to the flat panel display unit”, see rejection of claim 4.

9. Claim 9.

The step is obvious, because Yamamura in paragraph 0015 teaches the step of “The real size display system according to claim 1, wherein a real size of a subject of the first image information and the second image information is measured to generate the measurement information”. And also see rejection of claim 1.

10. Claim 10.

The step is obvious, because Yamamura in paragraph 0015 teaches the step of “The real size display system according to claim 9, wherein the (Yamamura in paragraph 0016 teaches a LCD) flat panel display unit uses the second image information to display an image of the subject and a size of the displayed subject is the real size of the subject. And also see rejection of claim 1.

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11. Claim 11.

Funakoshi in paragraph 0008 teaches the step of “The real size display system is according to claim 5, wherein a distance between the subject and the image of the subject is measured to generate the measurement information”. And also see rejection of claim 1.

12. Claim 12.

“The real size display system according to claim 10, wherein the flat panel display unit uses the second image information to display a second image of the subject and a size of the displayed subject is the real size of the subject”. See rejection of claim 1.

13. Claim 13.

“The real size display system according to claim 1, wherein the flat panel display unit comprises at least one of a button, a switch, a touch-operated icon on a screen of the flat panel display for enabling real-size display operation”. Funakoshi illustrates it in drawing 4.

14. Claim 14.

“The real size display system according to claim 5, wherein the flat panel display unit comprises at least one of a button, a switch, a touch-operated icon on a screen of the flat panel display for enabling real-size display operation”. Funakoshi illustrates it in drawing 4

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini


JEFFERY BRIER
PRIMARY EXAMINER